IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW MEXICO

ERNEST DAN AND ELSIE DAN, on their own behalf, and as parents and next friends of ERIC DAN, a minor,

Plaintiffs,

vs. No. CIV 01-025 MCA/LFG-ACE

THE UNITED STATES OF AMERICA,

Defendants.

PLAINTIFFS' REQUESTED FINDINGS OF FACT & CONCLUSIONS OF LAW

The plaintiff's in this matter, Elsie Dan and Ernest Dan, on behalf of their son, Eric Dan, hereby respectfully submit to the court their Requested Findings of Fact and Conclusions of Law.

REQUESTED FINDINGS OF FACT.

1. Elsie and Ernest Dan are Eric Dan's natural parents.* [1]

2. This case is brought on behalf of Eric Dan by his parents.

3. Eric Dan is a minor who was born on September 18, 1994. He was approximately four years eight months old on July 21, 1998. [Exhibit 1].

4. In 1998 the Dan family lived in Red Mesa, Arizona, about fifty miles west from the Northern Navajo Medical Center (NNMC) in Shiprock. The Dans still live in the same location. [Testimony of parents].

5. The Dan family lived in a rural area about ten miles from the nearest paved road. [Testimony of parents].

6. It can take an hour and a half, or more, to travel from the Dans' home to NNMC. [Testimony of parents].

[1] An asterisk (*) after the requested finding indicates that the parties stipulated to this fact in the pretrial order.

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7. NNMC is a federal facility operated by the Indian Health Service, an agency within the Department of Health & Human Services. It provides medical services to Navajo Indians and other eligible patients.

8. Dr. Karen Fogelberg was a surgeon employed by the United States on July 21, 1998, to work at NNMC and to provide surgical services to eligible patients, Navajo patients in particular. [Exhibit 33].

9. Jeannette Hart was a registered nurse employed by the United States on July 21, 1998, to work at NNMC in the Intensive Care Unit. Nurse Hart was and is the chief nurse in the ICU. [Exhibit 35].

10. Margaret (Peggy) Lemon was a registered nurse employed by the United States on July 21, 1998, to work at NNMC in the Intensive Care Unit. [Exhibit 34].

11. Margaret Milam was a registered nurse employed by the United States on July 21, 1998, to work at NNMC in the Intensive Care Unit. She was the charge nurse in the ICU after 7:00 p.m. [Exhibit 35].

12. J.M. Russell was a registered nurse employed under contract with the United States on July 21, 1998, to work at NNMC in the Intensive Care Unit. Nurse Russell was a traveling nurse, or locum tenens, working as an independent contractor. [Exhibit 35].

13. The Intensive Care Unit at NNMC had an existing written policy on July 21-22, 1998, prohibiting the admission of pediatric patients under age 12 to the ICU. Such patients were to be stabilized and transferred to a pediatric intensive care unit (PICU), such as the Pediatric ICU at the University of New Mexico (UNMH). [Exhibit 2, 3, 4, 6, 60, 33, 34, 35; Testimony Dr. Ponamon, Ms. DeFeo, and Dr. Abel, and Dr. Cardin].

14. A PICU is specially equipped and staffed for the handling of critically ill pediatric patients, and the medical staff in a PICU is certified in pediatric advanced life support (PALS). [Testimony Dr. Ponamon].

15. Eric Dan first complained to his parents about stomach pain on the afternoon of Sunday, July 19, 1998. [Testimony of parents; Exhibit 1].

16. Eric Dan's symptoms of abdominal pain were intermittent until Tuesday morning, July 21, 1998. [Testimony of parents; Exhibit 1].

17. Elsie Dan took Eric Dan to the Northern Navajo Medical Center on Tuesday, July 21, 1998, arriving at approximately 12:05 p.m. Arrival was delayed due to transportation problems with the family vehicle. A relative had to take Eric and his mother to the hospital. [Testimony of parents; Exhibit 1].

18. In the emergency room, Elsie Dan reported that Eric had a sore belly since morning, no bowel movement since Sunday, incidents of burping and some belching since Sunday, a fever on Monday, and one incident of vomiting.* [Exhibit 1].

19. Eric was examined by Dr. Lemauviel in the emergency room. Dr. Lemauviel found that Eric had an enlarged abdomen that was distended, tense, and firm.* [Exhibit 1].

20. Dr. Lemauviel was the emergency department physician initially in charge of Eric's care. She found Eric to be dehydrated and to have a small bowel obstruction. [Exhibit 1].

21. Dr. Lemauviel found that Eric was alert, that he had diminished bowel sounds and no stool in vault, that he was pale and thin, that he groaned non-stop, that he had a dry oral pharynx, that his lips were sticking to his teeth, and that he had crepitant sounds in his abdomen on expiration.* [Exhibit 1].

22. A blood test taken in the emergency room showed high counts of white blood cells and neutrophyls, and a low count of lymphocytes.* [Exhibit 1].

23. Eric Dan's white blood cell count (11.0—a normal range is 4.8-10.8) in the emergency room was slightly elevated, indicating the presence of an infection. [Exhibit 1; Testimony of Dr. Ponamon].

24. Laboratory studies taken in the emergency room showed low bicarbonate, indicating a slight acidosis. Eric also had a low sodium count, indicating some imbalance in electrolytes. [Exhibit 1; Testimony of Dr. Ponamon].

25. Prior to surgery, Eric was tachycardic and had labored rapid breathing.* [Exhibit 1; Testimony of Dr. Ponamon].

26. Tachycardia is an abnormally high heart rate. It is a symptom of another medical problem and is normally treated by treating the underlying condition causing the tachycardia, such as dehydration. [Testimony of Plaintiff's Liability Experts].

27. Eric's labored, rapid breathing, with respiration rates on occasion in excess of 30 breaths per minute pre-operatively, indicated tachypnea, an abnormally high respiration rate. [Testimony of Plaintiff's Liability Experts].

28. Dr. Karen Fogelberg was consulted about Eric's condition while Eric was in the emergency room and she concluded that he most likely had a perforated appendix with small bowel obstruction. [Exhibit 1].

29. Dr. Fogelberg wrote a surgical assessment at 1:00 p.m. and concluded that Eric needed an appendectomy. She obtained Elsie Dan's consent for the operation. [Exhibit 1].

30. Pre-operatively, at 1:10 p.m., Eric had even, regular respirations, was alert and oriented, and had warm, dry, and pink skin.* [Exhibit 1].

31. Prior to surgery, Eric had a diffusely tender abdomen.* [Exhibit 1].

32. Eric Dan was discharged from the emergency department to the operating room in guarded condition at 1:20 p.m. for an appendectomy to be performed by Dr. Karen Fogelberg. [Exhibit 1].

33. Between 1:20 and 1:45 p.m., the anesthesiologist, Dr. Neufeld, conducted a pre-anesthesia evaluation of Eric, reporting that Eric's cardiac and pulmonary statuses were within normal limits. Dr. Neufeld indicated that Eric would be discharged to the ward post-operatively. [Exhibit 1].

34. The pre-anesthesia evaluation by Dr. Neufeld, the anesthesiologist, reported that Eric had an ASA rating of 4.* This rating indicates potential for problems with the patient's care, such as clinical instability and possible mortality during surgery. [Exhibit 1; Testimony of Dr. Ponamon, Ms. DeFeo].

35. Anesthesia was started at 1:45 p.m.* [Exhibit 1].

36. The first surgical incision was made at 2:01 p.m. and surgery was completed at 3:00 p.m.* [Exhibit 1].

37. During surgery, Eric received doses of 150 mcg Fentanyl; 0.5 mg Versed; 40 mg Propofol; 20 mg Succinylcholine; and 30 mg Rocuronium.* [Exhibit 1].

38. The dosages of anesthesia medications given to Eric caused him to remain unconscious for a longer period than is normal post-operatively. [Testimony of Dr. Ponamon and Ms. DeFeo].

39. According to the operative report, "copious" amounts of fluid drained from the surgical opening upon entering the abdomen. [Exhibit 1].

40. 200-300 cc's of this fluid were aspirated by Dr. Fogelberg during surgery. [Exhibit 1].

41. A small amount of fluid was further aspirated from the right paracolic gutter of Eric's body.* [Exhibit 1].

42. A "fairly significant volume" of cloudy infected fluid was aspirated from Eric's pelvis.* [Exhibit 1].

43. Estimated blood loss during surgery was 20-30 cc. The post-anesthesia care unit record indicates a loss of 30 cc's. Dr. Fogelberg estimated a loss of 20 cc's. [Exhibit 1].

44. During surgery, 2,000 cc. normal saline with Tobramycin was used to irrigate Eric's abdominal wound.* [Exhibit 1].

45. A Tobramycin wash helps to combat further infection within the abdominal cavity that might result from spilling of contents from a perforated appendix and the surgical procedure.

46. During surgery, Eric was intubated with the endotracheal tube placed at 20 cm and then pulled back to 17 cm. The endotracheal tube used to intubate Eric was placed in the right bronchial mainstem during surgery and remained post-operatively until Eric was extubated. [Exhibit 1; Testimony of Dr. Ponamon, Dr. Abel, and Ms. DeFeo].

47. Eric's perforated appendix was successfully removed and sent for a lab analysis. [Exhibit 1].

48. Eric's wound was packed open.* [Exhibit 1].

49. Packing a wound open allows drainage of fluid from the surgical incision. {Testimony of Liability Experts]

50. There is no record of urinary output during surgery.* [Exhibit 1, 33].

51. Eric had no catheter in his bladder during surgery. A Foley catheter was inserted after surgery was complete. While under anesthesia and during surgery, Eric would have urinated on the table or the gurney. [Exhibit 1,33].

52. Following surgery, Eric was sent to the intensive care unit intubated.* [Exhibit 1].

53. Dr. Fogelberg determined that Eric should go through the post-anesthesia recovery in the ICU. The post-anesthesia recovery unit (PACU) staff handled Eric's post-operative recovery from the end of surgery until Eric was extubated. [Exhibit 1].

54. Eric arrived unconscious in the ICU at 3:10 p.m. on the ventilator. [Exhibit 1].

55. Eric was reported to be unresponsive upon admission to the intensive care unit and asleep when discharged from post-anesthesia care.* [Exhibit 1].

56. Following surgery, Eric's condition was stable. He was also listed to be in critical condition. [Exhibit 1].

57. Eric was not reported to have a post-anesthesia recovery score greater than 6 ½ during post-anesthesia care.* [Exhibit 1].

58. A score of 8-10 indicates readiness for discharge from the PACU. [Exhibit 1].

59. No direct report from the operating room nurses or from the anesthesiologist was given to the intensive care unit nurses who later cared for Eric after his admission as an ICU patient. [Exhibit 1].

60. Eric was extubated at about 4:20 p.m. to 4:23 p.m. on the order of Dr. Fogelberg.* [Exhibit 1].

61. When discharged from the PACU, Eric was noted to be asleep. [Exhibit 1].

62. Eric's surgery was successful, he was stable and in reasonably good condition after the surgery, his vital signs were largely normal, except for the heart rate, and Dr. Fogelberg felt that she could handle Eric's post-operative recovery successfully. [Exhibit 1, 33].

63. Dr. Fogelberg entered her admitting order at 4:00 p.m., at which time she ordered Eric admitted to the ICU in violation of the written policy of NNMC against admitting pediatric patients to the ICU. The stated reason for the admission was status post perforated appendicitis. This initial set of orders was significant in that it set up the ICU care that Eric was to receive during the ensuing hours in the ICU. Nurse Lemon acknowledged the orders at 4:30 p.m. The orders say nothing about sepsis, acidosis, tachycardia, tachypnea, or about the fact that Eric was a special patient, a child, whose status must be carefully watched and whose condition must be carefully managed. [Exhibit 1, 33].

64. In her 1st set of orders, Dr. Fogelberg did not order an ABG, did not order any kind of invasive monitoring, such as an arterial catheter or the use of a Swan Ganz catheter, did not order any monitoring of arterial blood pressure or central venous pressure, or cardiac output, or any of the other indicators of hemodynamic status and perfusion that can be measured by means of invasive monitoring. Nor did Dr. Fogelberg order more frequent monitoring of vital signs than were normally done for adult patients. [Exhibit 1, 33].

65. Nurse Jeannette Hart assumed responsibility for Eric's nursing care in the ICU after Eric's discharge from the PACU until 5:00 p.m., when Peggy Lemon, who was busy with another ICU patient, was able to return to Eric. [Exhibit 1, 34].

66. Eric did not have a nurse ratio of 1:1 during the time he was cared for by Nurse Lemon. Nurse Lemon was also assigned to another ICU patient. [Exhibit 1, 34].

67. Nurse Lemon was not certified in PALS and she had little experience at NNMC working with critically ill pediatric patients. [Exhibit 34].

68. Nurse Lemon had prior experience working in hospitals in Alaska and Wisconsin. She received her nursing education in Wisconsin and Alaska. She currently works at a federal hospital in Wisconsin serving veterans. [Exhibit 34].

69. At 4:30 Dr. Bochsler, a pediatrician was asked for a consult on Eric. Dr. Bochsler noted that Eric still had a distended abdomen, that Eric had low sodium, which should be

checked again that evening, and that Eric was very tachycardic. He indicated that Eric would need lots of fluids for 3rd spacing and he suspected that Eric had sepsis. Dr. Bochsler recorded that Eric was sleepy, but opened eyes to command, that Eric had good capillary refill, and that Eric's blood pressure was good. [Exhibit 1].

70. At 5:00 p.m. Eric was awake and crying, telling his mother he was thirsty. He was reported to have been kicking and swinging his arms. By 5:30 p.m., when Nurse Lemon wrote her first nursing note, he was sedated and quiet (Eric received morphine at 4:30 p.m. and Versed at 5:00 p.m.). His color was pink, his skin was warm and dry, and his capillary refill was less than one second. [Exhibit 1].

71. Eric's vital signs at 5:00 p.m. were largely normal, except that his heart rate was 193 beats per minute. Eric had been tachycardic since before surgery and the tachycardia continued, gradually tending upward above 200 beats per minute. [Exhibit 1].

72. At 6:00 p.m. Eric's vital signs portended problems ahead. His respiration rate dropped to 16 breaths per minute, his systolic blood pressure dropped below 100, and he continued to be tachycardic. Beginning at this point, Eric's blood pressure started trending downward and his tachycardia worsened progressively. In addition, Eric's respirations continued to be abnormal; instead of continuing to be tachypneic, Eric now had abnormally low respirations rates. [Exhibit 1, 41, 42, 43, 44].

73. Despite the ominous signs at 6:00 p.m., no effective interventions were attempted. The only measures taken were to give Eric more morphine and more Versed to try to lower Eric's heart rate through the use of excessive amounts of depressants. [Exhibit 1, 33, 34, 41, 42, 43, 44].

74. At 6:20 p.m., Nurse Lemon recorded that Dr. Fogelberg was at Eric's bedside and that Eric's heart rate had been in the 200-210 range, but that after giving 4 mg's of morphine over twenty minutes, Eric's heart rate dropped to 180. Eric was given another dose of Versed at this time. [Exhibit 1].

75. There is no further record of Dr. Fogelberg being in the ICU from 6:20 p.m. to 10:00 p.m., during which time Eric's vital signs steadily worsened. [Exhibit 1, 33, 34, 35].

76. Nurse Lemon failed to record an assessment of the effects of morphine and Versed on Eric's consciousness and neurological condition, or the rate and quality of his breathing despite the fact that his respiration rate had already dropped to 16 by 6:00 p.m. [Exhibit 1].

77. No vital signs for Eric Dan were recorded for Eric at 7:00 p.m. This was the job of Nurse Lemon. [Exhibit 1, 34].

78. A formal physical assessment on the flow sheet was also due at 7:00 or 7:15 p.m. This was not completed by Nurse Lemon. [Exhibit 1, 34].

79. There is little documentation that Nurse Lemon was attending to Eric during the period from 6:20 p.m. until 7:30 p.m., when Nurse Lemon completed her shift, only a single entry in the nursing notes at 7:00 p.m. stating that Eric was sedated with 2 mg's of Versed, patient quiet, heart rate at 202, and "MD aware." [Exhibit 1, 34]

80. Nurse J.M. Russell started her shift at 7:00 p.m. and replaced Peggy Lemon at 7:30 p.m. At this time Eric was given a 1:1 nursing ratio, although Nurse Russell was not PALS certified and was inexperienced in caring for critically ill pediatric patients. Nurse Russell was also a contract nurse only temporarily employed at NNMC. [Exhibit 1, 35]

81. While attending to Eric Dan, Nurse Russell worked under the supervision of Margaret Milam, the charge nurse. [Exhibit 1, 10, 11, 12, 13, 34].

82. At 7:15 p.m. Nurse Russell started Eric on his first dose of Ampicillin, which Nurse Lemon had failed to give. [Exhibit 1].

83. Nurse Russell made an initial assessment of Eric at 7:30 p.m. She noted that Eric was thrashing in bed and that liquid was seeping out through Eric's bandages. [Exhibit 1, 35].

84. J.M. Russell then spoke with Dr. Fogelberg by telephone at 7:50 p.m. and provided an update on Eric's status. [Exhibit 1, 35]

85. Nurse Russell recognized that Eric was febrile, and at 8:00 she recorded his temperature to be 103.5°. This was the first recorded temperature in three hours. [Exhibit 1, 35].

86. Dr. Fogelberg gave a telephonic order at 7:50 to give Eric a single bolus of fluid (200 cc's) and to increase Eric's IV infusion rate to 125 cc/hr. [Exhibit 1, 35].

87. At 8:00 p.m., Nurse Russell noted Eric had a Glasgow Coma Scale score of 10. [Exhibit 1, 35]

88. Eric's recorded vital signs at 8:00 p.m. reflected continued deterioration in Eric's status, yet Dr. Fogelberg ordered no major interventions such as repeat boluses of fluid, re-intubation of Eric, use of inotropic therapy, or transfer of Eric to UNMH. The record contains no evidence that Dr. Fogelberg appreciated the gravity of Eric's condition or understood that he was deteriorating and headed toward a cardiorespiratory collapse. [Exhibit 1, 33, 35, 39, 41, 42, 43, 44; Reports and Testimony of Dr. Ponamon, Dr. Abel, and Ms. DeFeo]

89. 9:00 p.m. was a critical juncture in Eric's condition. At 9:00 p.m., Eric's oxygen saturations fell into the 80's and his blood pressure was recorded to have dropped to 67/26. Eric was clearly hypotensive and his heart rate continued to track upward above 200. His temperature was also 104.8°, a dangerously high level. [Exhibit 1, 33, 35, 39, 41, 42, 43, 44; Reports and Testimony of Dr. Ponamon, Dr. Abel, and Ms. DeFeo].

90. On her own, Nurse Russell replaced Eric's nasal cannula with a face mask at 9:15 p.m. for better oxygenation. A face mask had been ordered originally at 4:00 p.m., but Dr. Fogelberg allowed it to be replaced at 4:27 p.m., immediately after extubation, with a nasal cannula. A nasal cannula is not as effective at delivering oxygen as a face mask, and both require that the patient breathe on his/her own. [Exhibit 1, 33, 35].

91. At 9:30 p.m., Dr. Fogelberg was updated by Nurse Milam by telephone. Dr. Fogelberg's only response was to order a repeat dose of Tylenol. The Tylenol was used to reduce temperature. No other interventions were ordered and there is no indication that Dr. Fogelberg appreciated the gravity of Eric's condition or understood that he was deteriorating and headed toward a cardiorespiratory collapse. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

92. Between 9:00 p.m. and 10:00 p.m., Dr. Fogelberg made no other telephone orders to address Eric's condition. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

93. The labs ordered for 8:00 p.m. were not reported until 9:44 p.m. Dr. Fogelberg claims she did not did not review the labs, which showed worsening acidosis. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

94. At 10:00 p.m. Dr. Fogelberg appeared in the ICU and examined Eric. At this time Eric's heart rate was 220 beats per minute, he was still hypotensive (BP: 72/32) and had been for over an hour, and his respiration rate was abnormal (16). Eric was in increasingly bad condition and he was obviously headed toward uncompensated shock. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

95. At 10:10 p.m. Dr. Fogelberg left the ICU after entering orders and leaving her beeper number with the nurses. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

96. At 10:10 p.m. Dr. Fogelberg ordered continuation of the face mask, increased the infusion rate for IV fluids by another 25 cc's per hour, authorized use of more Tylenol, added calcium and a CBC (complete blood count) to the morning labs, and ordered a chest x-ray in the morning. No other interventions were ordered and there is no indication that Dr. Fogelberg appreciated the gravity of Eric's condition or understood that he was deteriorating and headed toward a cardiorespiratory collapse. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

97. Dr. Fogelberg also requested at 10:10 that she be called if Eric's urine output fell below 15 cc. per hour. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

98. Dr. Fogelberg had the opportunity at 10:00 p.m. to take aggressive measures to treat Eric and prevent cardiorespiratory arrest, such as re-intubating Eric, giving Eric repeat boluses

of fluid, using inotropic therapy, using cooling blankets or baths, and ordering Eric's transfer to a PICU. She did none of these things. She could also have phoned UNMH and have asked for advice from a PICU specialist. Instead she left the ICU and wrote down her beeper number. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

99. Dr. Fogelberg also had the opportunity at 10:00 p.m. to order precise diagnostic tests to inform with her greater accuracy of Eric's precise condition, such as ordering immediate ABG's, invasive monitoring, and a chest x-ray. She did none of these things. Instead she left the ICU and wrote down her beeper number. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

100. After Dr. Fogelberg left the ICU Eric's status continued to deteriorate. There is no indication that Dr. Fogelberg returned to the ICU or communicated with the ICU prior to 10:50 p.m. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

101. Dr. Fogelberg was paged at 10:50 p.m., after Eric's respiration rate dropped to 8 respirations per minute.* [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

102. According to Eric's family, the rate on the monitoring machine in Eric's room gave a reading of 2 respirations per minute before the nurses responded. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

103. Eric's respiration rate dropped down below 8 respirations per minute after Dr. Fogelberg was paged. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

104. After being paged at 10:50 p.m., Dr. Fogelberg ordered by telephone a 1.5 mg dose of Narcan, which Nurse Russell administered at about 10:55 p.m. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

105. Narcan is an antagonist of morphine, meaning that it acts to reverse the effects of morphine. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

106. At 11:00 p.m., Nurse Russell reported that Eric's respiration rate had been in the 5-8 beats per minute range. His oxygen saturations based on pulse oximetry readings were in the 60-65% range. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

107. At 11:00 p.m., Nurse Russell decided to begin hand-bagging Eric. Hand-bagging is an emergency resuscitative technique to provide forced air into the lungs. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

108. Dr. Fogelberg did not come to the ICU immediately after the first page, and at 11:00 p.m., Nurse Russell again paged Dr. Fogelberg. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

109. At 11:00 p.m., Nurse Russell also paged Dr. Bochsler, a pediatrician at NNMC who had examined Eric at 4:30 p.m. Dr. Bochsler came to the ICU and worked to resuscitate Eric. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

110. Dr. Bochsler arrived at Eric's bedside before Dr. Fogelberg came, even though she had been paged earlier and even though Dr. Fogelberg was in the emergency department directly above the ICU. An elevator and stairs provide quick access to the ICU from the emergency department. It takes less than a minute to travel from one department to the other. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

111. At 11:10 p.m., Dr. Bochsler re-intubated Eric with an endotracheal tube and placed him on mechanical ventilatory support. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

112. At 11:20 p.m. Dr. Bochsler ordered a chest x-ray that showed atelectasis in the upper lobe of the right lung while he was at NNMC. Eric's right upper lobe in his lungs had collapsed. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

113. At 11:30 p.m., Dr. Bochsler called the University of New Mexico Hospital (UNMH) to discuss transfer of Eric to the University's pediatric intensive care unit. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

114. At 11:30 p.m., Dr. Bochsler ordered arterial blood gases (ABG), the results of which were reported at 11:40 p.m. The ABG showed uncompensated metabolic acidosis and a severe PH imbalance at the time taken. The tests show that Eric was having serious perfusion problems, that he was very acidic (below the panic range according to the legend), and that he was hypoxic. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

115. At 11:40 p.m., Dr. Bochsler ordered the preparation of dopamine (100 mg in 100 cc. DSW) to be available at bedside. Dopamine is a vasopressor agent with alpha-adrenergic qualities that helps to restore blood pressure. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

116. The dopamine was prepared, but Eric did not receive dopamine while at NNMC. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

117. Eric did not receive any inotropic therapy at NNMC. Inotropic therapy is the use of drugs categorized as inotropes, such as dopamine, phenylephrine, epinephrine, norepinephrine, to restore hemodynamic balance, assist organ perfusion, and restore blood pressure. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

118. At 1:15 a.m., Dr. Bochsler ordered Eric transferred to UNMH. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

119. There is no information in the medical record indicating that medical doctors at Northern Navajo Medical Center, including Dr. Fogelberg, considered transferring Eric to a hospital with a pediatric intensive care unit, such as the University of New Mexico Hospital, prior to about 11:30 p.m.* [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

120. Eric was tachycardic from the time of his extubation at about 4:20-4:23 p.m. on July 21, 1998, until he was transferred to the University of New Mexico Hospital at about 1:30 a.m. on July 22, 1998. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

121. Eric left NNMC at 1:40 a.m. on July 22, 1998, in a helicopter ambulance from San Juan Regional Hospital in Farmington, New Mexico. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

122. The helicopter ambulance made the flight in 14 minutes. The flight to UNMH took 1 hour and 9 minutes. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

123. Upon arrival at UNMH Eric was immediately admitted to the PICU under the care of Dr. Crowley. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

124. At UNMH, Eric Dan was found to be suffering from hypovolemic shock due to dehydration. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

125. At UNMH, Eric Dan received aggressive fluid therapy that included several boluses of IV fluid. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

126. At UNMH, Eric received more aggressive antibiotic therapy than he had received at NNMC, including much larger doses of Ampicillin. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

127. At UNMH, Eric Dan was found to have sepsis and to be acidotic, and to be suffering from uncompensated shock. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

128. At UNMH, Eric Dan was found to be tachycardic and hypotensive. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

129. At UNMH, Eric Dan received inotropic therapy, including the administration of dopamine. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

130. At UNMH, Eric Dan was found to be suffering from a right upper lung collapse. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

131. At UNMH, Eric Dan was diagnosed as having suffered hypoxic, ischemic encephalopathy, a severe brain injury caused by oxygen deprivation related to constricted blood flow and low levels of arterial oxygen. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

132. Eric's MRI taken on July 26, 1998, showed global brain damage, with general edema and focal injuries, particularly in the cerebellum and watershed regions of the cortex. These injuries reflect a generalized trauma arising from lack of oxygen and reduced blood flow, consistent with cardiorespiratory arrest. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

133. Eric Dan was hospitalized at UNMH for several weeks, then sent to Los Ninos, a pediatric rehabilitation facility in Phoenix, for several more weeks, and then he sent to the Northern Navajo Medical Center for an additional period of hospitalization. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

133. Eric's condition has changed little in the time since he was discharged from UNMH on September 18, 1998. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

134. NNMC staff was negligent in its handling of Eric's care, both as to treatment and diagnosis. There were multiple errors and a general failure to appreciate Eric's changing status, which was clearly deteriorating during the evening of July 21, 1998. Dr. Fogelberg in particular failed to connect the dots and get a clear view of Eric's overall picture. If she had, it is doubtful that she would have continued to avoid needed interventions. The failure to use better, more accurate diagnostic methods and the failure to act more aggressively in treating Eric's underlying condition were substandard. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

135. The medical record, admissions made by the government and medical staff at NNMC, and the expert witness reports and testimony of plaintiffs' liability experts establish clearly that the medical care received by Eric Dan at NNMC was negligent and well below the standard of care, proximately causing Eric Dan to suffer a severe hypoxic-ischemic brain injury. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

136. Medical staff at NNMC deficiently addressed Eric Dan's tachycardia in a negligent manner that fell below the standard of care. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

137. Medical staff at NNMC deficiently addressed Eric Dan's dehydration in a negligent manner that fell below the standard of care. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

138. Medical staff at NNMC deficiently addressed Eric Dan's acidosis in a negligent manner that fell below the standard of care. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

139. Medical staff at NNMC deficiently addressed Eric Dan's sepsis in a negligent manner that fell below the standard of care. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

140. Medical staff at NNMC deficiently addressed hypotension in a negligent manner that fell below the standard of care. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

141. Medical staff at NNMC deficiently addressed Eric Dan's hyperthermia in a negligent manner that fell below the standard of care. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

142. Medical staff at NNMC negligently failed to monitor and chart Eric Dan's vital signs adequately. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

143. Medical staff at NNMC negligently failed to use invasive monitoring that would have allowed a much more accurate assessment of Eric Dan's condition and a better appreciation of potential problems that lay ahead. Such monitoring would have also been available to guide therapy and make it more targeted and effective. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

144. Medical staff at NNMC negligently failed to monitor Eric Dan's cardiac condition adequately. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

145. Medical staff at NNMC negligently failed to monitor and manage Eric Dan's blood pressure adequately. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

146. Medical staff at NNMC negligently failed to monitor and manage Eric Dan's breathing adequately. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

147. Medical staff at NNMC negligently failed to use inotropic therapy in a timely manner. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

148. Medical staff at NNMC negligently failed to diagnose Eric Dan's deteriorating post-operative medical condition accurately in a timely manner. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

149. Medical staff at NNMC negligently failed to intervene in a timely manner to address Eric Dan's deteriorating post-operative medical condition. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

150. Medical staff at NNMC negligently failed to employ appropriate methods, techniques, and treatments to address Eric Dan's deteriorating post-operative medical condition. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

151. Medical doctors and nursing supervisors, particularly Dr. Fogelberg, did not properly supervise and communicate with the nursing staff assigned to Eric Dan. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

152. In the exercise of reasonable care, medical staff at NNMC should have done various things, including not limited to:

a. Transferred Eric Dan post-operatively to the pediatric intensive care unit at UNMH.
b. Kept Eric Dan intubated post-operatively.
c. Re-intubated and provided ventilatory support to Eric Dan much earlier, probably by 6:00 p.m. and no later than 10:00 p.m.
d. Taken arterial blood gases much earlier, both pre-operatively or intra-operatively, and within a half hour after surgery, if not before.
e. Started Eric Dan on Flagyl pre-operatively.
f. Started Eric Dan's broad spectrum antibiotics earlier and have been more aggressive in their use, including giving larger doses of Ampicillin and Clindamycin.
g. Monitored Eric Dan's vital signs, including temperature, more frequently and carefully.
h. Used invasive monitoring to measure cardiac output, fluid needs, central venous pressure, internal blood pressure, and oxygen use.
i. Started a central line during surgery.
j. Made sure that there was more than one IV line in place.

k. Aggressively addressed Eric Dan's dehydration with multiple fluid boluses on the order of 20 ml/kg/hr until Eric was producing 2ml/kg of fluid output.
l. Employed inotropic therapy well before Eric crashed at 10:50 p.m.
m. Assigned to Eric's care someone who was PALS certified and who had experience dealing with critically ill children.
n. Maintained a 1:1 nurse patient ratio after extubation.
o. Ordered additional labs and blood work post-operatively.
p. Used methods such as tepid sponge baths and cooling blankets to address Eric's hypothermia.
q.Made sure that an M.D. (Dr. Fogelberg and Dr. Bochsler) personally visited Eric
r. Dan's bedside and reviewed his chart with greater frequency than was done.
s. Avoided the use of excessive amounts of morphine sulfate and Versed, especially the use of morphine sulfate to control tachycardia.
t. Kept all alarm monitors on.
u. Taken aggressive measures to address and buffer Eric Dan's acidosis.
v.Monitored fluid intake and output more carefully and consistently, and avoided making changes in the record.
w. Recorded and monitored medications more carefully.
x. Seen the warning signs that indicated Eric's condition was deteriorating and taken aggressive action to protect Eric's cardiorespiratory system.
y. Taken aggressive measures to give ventilatory support and blood pressure support to Eric Dan once he became hypotensive.
z. Sought advice or a consult from a pediatric intensivist at UNMH.
aa. Recognized that staff at NNMC was in over its head with Eric's case and have taken measures that would best have protected Eric's health, such as by transferring him in a timelier manner.

[Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

Transfer and Consultation

153. The single biggest error in Eric Dan's treatment was the failure to make a timely transfer. Without this error, none of the other negligence would have happened and Eric would not have sustained a serious brain injury. Not only did this violate the standard of care, it directly violated hospital policy. [Exhibit 1, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony of liability experts].

154. If Dr. Fogelberg had followed hospital policy she would have transferred Eric post-operatively while he was still on the ventilator during the PACU period from 3:10 to 4:30 p.m., instead of admitting him as a patient to the ICU. [Exhibit 1, 4,5, 6, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony of liability experts].

155. There were no medical reasons why Eric could not be transferred post-operatively. [Exhibit 1, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony of liability experts].

156. Dr. Fogelberg could have sought consultation with a specialist in the PICU at UNMH, but she elected not to seek any outside assistance or advice. [Exhibit 1, 24, 27, 30, 31, 33, 39, 41, 42, 43, 44; Testimony of liability experts].

157. Dr. Fogelberg had numerous opportunities to transfer Eric during the evening of July 21, 1998, and should have ordered a transfer in view of Eric's vital signs, especially between 6:00 p.m. and 10:00 p.m. [Exhibit 1, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony of liability experts].

158. Both Nurse Lemon and Nurse Russell questioned Eric Dan's having been admitted to the intensive care unit at NNMC. Nurse Russell was told by her supervisor, Nurse Milam just to follow orders. There is no evidence that Nurse Milam raised any questions about Eric Dan's having been admitted to the ICU in violation of hospital policy. There is no indication that Nurse Hart, who was present upon Eric's admission to the ICU, raised any concern about Eric's admission despite her role as the head nurse in the ICU. [Exhibit 1, 24, 27, 30, 31, 34, 35, 39, 41, 42, 43, 44; Testimony of liability experts].

Intubation and Extubation

159. Dr. Fogelberg did not need to extubate Eric at 4:23 p.m. She could have kept him intubated and on the ventilator while she observed how his system was dealing with the tachycardia, sepsis, and acidosis. By keeping him ventilated, Dr. Fogelberg would have had an easier time with invasive monitoring and with placing a central line for hemodynamic support. This would have facilitated more timely administration of antibiotics and fluids. [Exhibit 1, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony of liability experts].

160. Dr. Fogelberg had numerous opportunities to re-intubate Eric after 6:00 p.m. in order to assure proper oxygenation and to assist his respiratory system with breathing. This would have been especially useful in view of the excessive use of narcotics and the strain on Eric's breathing muscles. [Exhibit 1, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony of liability experts].

161. Medical staff at NNMC did not re-intubate Eric Dan prior to 11:10 p.m. on July 21, 1998. This was after Eric crashed. [Exhibit 1].

162. When Eric crashed at 10:50 p.m., Dr. Fogelberg was paged and had to be paged a second time before going to Eric's bedside. Eric was not re-intubated for 20 minutes. Dr. Fogelberg was less than one minute away in the emergency room when paged, directly above the ICU. Dr. Fogelberg's failure to make a timely appearance at Eric's bedside was a violation of the standard of care and delayed Eric's resuscitation. [Exhibit 1, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony of liability experts].

163. Dr. Fogelberg negligently failed to re-intubate Eric Dan in a timely manner. Her failure was below the standard of care. [Exhibit 1, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony of liability experts].

164. Too deep of an intubation during surgery aggravated Eric Dan's respiratory condition by causing atelectasis in the right lung and reducing the ability of that lung to provide oxygen to the blood. Because of this problem Eric's breathing should have been monitored more closely and a chest x-ray should have been scheduled by Dr. Fogelberg for an earlier time than the next day. [Exhibit 1, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony of liability experts].

Narcotics & Sedatives

165. Eric Dan received 2 mg of morphine sulfate in the emergency room at 1:15 p.m.*[Exhibit 1].

166. At 4:35 p.m. Eric was given a 2 mg. intravenous dose of morphine sulfate by Nurse Hart.*[Exhibit 1].

167. At 5:50 p.m. Nurse Peggy Lemon gave Eric a 2 mg. intravenous dose of morphine sulfate.*[Exhibit 1].

168. At 6:10 p.m. Nurse Peggy Lemon gave Eric a 2 mg. intravenous dose of morphine sulfate.*[Exhibit 1].

169. 136. At 8:00 p.m. Nurse J.M. Russell gave Eric a 2 mg. intravenous dose of morphine sulfate "as per M.D.'s orders."[Exhibit 1].

170. The initial doctor's order for morphine authorized a dose of 1-2 mg. every 2 hours as needed for pain.[Exhibit 1].

171. At 6:00 p.m. Dr. Fogelberg issued a new order for morphine, authorizing 1-3 mg every two hours as needed for pain. Giving morphine under this order was not to begin until the time and dose for morphine given under the prior order expired.[Exhibit 1, 33].

172. The post-surgery administration of morphine sulfate (8 mg. in less than three and one half hours, and 6 mg. in 1 hour and 35 minutes) violated Dr. Fogelberg's orders. [Exhibit 1, 33].

173. The administration of morphine sulfate (8 mg. in less than three and one half hours) violated the written policies of NNMC. [Exhibit 1, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony of liability experts].

174. Dr. Fogelberg expressly denies that the doses at 5:50 p.m. and 6:10 p.m. were authorized by her. She says that Nurse Lemon violated the doctor's orders. [Exhibit 33].

175. According to Nurse Lemon the morphine given at 5:50 and 6:10 p.m. was administered in order to try to control Eric's heart rate, by depressing the heart medicinally. Nurse Lemon claims that Dr. Fogelberg instructed her to give these doses, but there is no recording of a verbal order or any other written indication that Dr. Fogelberg authorized the doses. [Exhibit 1, 34].

176. Morphine is a pain reliever, but it is also a cardiorespiratory depressant and a vasodilator, meaning that it acts to suppress the both heart rate and breathing, and that it expands the volume of the vascular system, which can aggravate fluid deficiencies and affect blood pressure. [Exhibit 1, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony of liability experts].

177. At the time Eric was given two untimely doses of morphine twenty minutes apart, his body was compensating for his acidosis, meaning that his body was trying to blow off excess carbon dioxide and restore PH balance. [Exhibit 1, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony of liability experts].

178. The morphine contributed to Eric's deterioration after 6:00 p.m., slowed his respiration rate, worsened his acidosis, hastened decompensation, and was a significant factor causing Eric's sudden deterioration and crash.

179. The dose of morphine given at 8:00 p.m., "as per M.D.'s orders," given by Nurse Russell after consulting with Dr. Fogelberg by telephone at 7:50 p.m., should not have been given in view of the earlier amounts given. Although there is no documentation that Dr. Fogelberg ordered the 5:50 p.m. and 6:10 p.m. doses of morphine, the fact that they were given is documented in Eric's chart and Dr. Fogelberg should have made herself aware of the maladministration of the morphine. Her lack of physical presence in the ICU from 6:20 p.m. until 10:00 p.m. prevented her from reviewing the chart herself. [Exhibit 1, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony of liability experts].

180. The nurses were supposed to give morphine to Eric only for pain, but they did not document that he was actually experiencing pain. The nurses could have spoken with his parents, who were in the room continuously after 5:00 p.m., or they could have made efforts to differentiate between pain and other possible problems, such as agitation due to mental confusion, shock, and poor perfusion. There are no documented indications that Eric was having any significant pain after 5:00 p.m. (he had received morphine at 4:35 p.m.). [Exhibit 1, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony of liability experts].

181. The nursing staff, Nurse Lemon in particular, failed to document the effects of the morphine on Eric's body. The record contains little evidence of proper assessment of how the morphine affected Eric's mental status, his neurological condition, level of consciousness, and his breathing quality, for example. Nor is there any written indication of whether or not the morphine had any effect on pain. [Exhibit 1, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony of liability experts].

182. Use of morphine to reduce heart rate is not a recognized medical method. This was especially inappropriate in a septic patient who was trying to compensate for his acidotic condition. [Exhibit 1, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony of liability experts].

183. The giving of excessive, unauthorized morphine was unreasonable and fell below the standard of care. [Exhibit 1, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony of liability experts].

184. Eric received a dose of Versed during surgery (0.5 mg.).[Exhibit 1].

185. At 5:00 p.m. Nurse Peggy Lemon gave Eric a 0.5 mg. dose of Versed.*[Exhibit 1].

186. Nurse Peggy Lemon gave Eric a 1.0 mg. dose of Versed at 6:20 p.m.[Exhibit 1].

187. Nurse Peggy Lemon gave Eric a 2 mg. dose of Versed at 7:00 p.m.[Exhibit 1].

188. The initial doctor's order for Versed authorized a dose of 0.5 mg every four hours as needed for agitation.[Exhibit 1].

189. At 6:00 p.m. Dr. Fogelberg issued a new order for Versed, authorizing 0.5-1.0 mg every three hours for pain. Giving Versed under this order was not to begin until the time and dose for Versed given under the prior order expired.[Exhibit 1, 33].

190. Because Eric received a full dose of Versed at 5:00 p.m., administration of Versed under the new order should not have begun until 9:00 p.m. without specific authorization from Dr. Fogelberg. There is no evidence of such authorization. [Exhibit 1, 33].

191. The post-surgery administration of Versed violated the physician's written orders. [Exhibit 1, 33].

192. The administration of Versed violated the written policies of NNMC. [Exhibit 1, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony of liability experts].

193. Versed is a sedative. It acts to depress the cardiorespiratory system. Versed has an additive effect to morphine and care must be taken when the two are given to a pediatric patient concurrently. Special care must be taken both as to dose and timing. [Testimony of liability experts].

194. The nurses were supposed to give Versed to Eric only for agitation (fear, anxiety, anger, panic), but Nurse Lemon did not document that he was actually agitated due to any emotional response. The nurses could have spoken with his parents, who were in the room continuously after 5:00 p.m., or they could have made efforts to differentiate between agitation and other possible problems, such as mental confusion, shock, and poor perfusion. There are no documented indications that Eric was agitated at 6:20 p.m. (he had just received 4 mg. of

morphine within the past half hour). [Exhibit 1, 24, 27, 30, 31, 33, 34, 39, 41, 42, 43, 44; Testimony of liability experts].

195. Nurse Lemon failed to document the effects of the Versed on Eric's body. The record contains little evidence of proper assessment of how the Versed given at 6:20 p.m. affected Eric's mental status, his neurological condition, level of consciousness, and his breathing quality. Nor is there any written indication of whether or not the Versed had any effect on pain. [Exhibit 1, 24, 27, 30, 31, 34, 39, 41, 42, 43, 44; Testimony of liability experts].

196. After 6:00 p.m. Nurse Lemon failed to record Eric's vital signs during the remainder of her shift, for an hour and a half, a violation of the standard of care that compounded the excessive use of morphine and Versed. The sole reference to any vital sign by Nurse Lemon was a brief notation in the nursing notes at 7:00 p.m. that the heart rate was 202, coupled with a cryptic note "MD aware." [Exhibit 1, 34].

197. It was a violation of the standard of care to fail to record the effects of the excessive doses of morphine and Versed given to Eric, and it was a violation of the standard of care to fail to record Eric's vital signs with greater frequency after the maladministration of these medications.

198. The administration of Versed by Nurse Lemon after 6:00 p.m. was unauthorized, inappropriate, unreasonable, and a violation of the standard of care. [Exhibit 1, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony of liability experts].

199. The Versed given to Eric after 6:00 p.m. contributed to his deterioration, slowed his respiration rate, worsened his acidosis, hastened decompensation, and was a significant factor causing Eric's sudden deterioration and crash. [Exhibit 1, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony of liability experts].

200. Eric's vital signs show a gradual deterioration beginning at about 6:00 p.m. Although Eric was not threatened with an immediate crisis at 6:00 p.m., the excessive narcotics and sedatives blunted his sympathetic nervous system's response to stress. Eric Dan's respiration rate was suppressed by the use of morphine sulfate and Versed post-surgically, which complicated and worsened his cardiorespiratory status, and which made it more difficult for Eric's body to compensate for the acidosis he was experiencing. The drag on Eric's system helped trigger his descent into uncompensated metabolic acidosis and was a significant factor in causing his sudden crash and the resulting hypoxic-ischemic brain injury. [Exhibit 1, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony of liability experts].

Fluids

201. Fluid resuscitation and volume restoration is a key element of treating sepsis and addressing tachycardia. Tachycardia is a classic sign of hypovolemia. Fluid resuscitation is also a pre-requisite to the use of inotropic therapy. Loss of fluids can lead to hypovolemia and

shock. Aggressive fluid therapy with repeat boluses of fluid in the amount of 20 cc's/kg should be considered. Eric could have benefited from repeat fluid boluses on the order of 350 cc's, given up to three times in succession over an hour period, depending on his response to the fluids. Boluses are more effective than gradual infusion during volume resuscitation because increasing the infusion rate does not ensure that fluid will stay in the vasculature. Boluses are especially important when there is third-spacing and vasodilatation. Volume resuscitation helps the body maintain adequate organ perfusion and helps to assure oxygen delivery to the tissues. [Exhibit 1, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony of liability experts].

202. Eric was already dehydrated upon arrival in the emergency room at NNMC. Eric's urine in the emergency room was dark yellow and hazy, consistent with dehydration. His lips and mouth were also dry, as reported by Dr. Lemauviel, the examining physician. Dr. Lemauviel diagnosed Eric with dehydration. [Exhibit 1, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony of liability experts].

203. In the emergency room, shortly after Eric's arrival, Dr. Lemauviel ordered IV fluids for Eric and at 12:15 p.m. Eric was started on normal saline at a rate of 200 cc's per hour by IV. A bag of normal saline is one liter in size. [Exhibit 1].

204. A second IV order In the emergency room, for 200 cc's (½ normal saline wide open with 20 mEq of potassium chloride), then 70 cc's per hour, was cancelled.[Exhibit 1].

205. During surgery, Eric lost "copious" amounts of fluid. Fluid spilled out onto the operating room table, fluid was aspirated from the abdomen, and Eric produced an unmeasured amount of urine during surgery. There is no documentation that the initial bag of normal saline ordered at 12:15 was changed during surgery or that a different fluid order was made. [Exhibit 1].

206. After surgery, Eric was stated to have received 1,000 cc's of fluid. This amount most likely reflects the total amount given after 12:15 p.m. [Exhibit 1, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony of liability experts].

207. There is no record of Eric receiving fluid between 3:00 p.m. and 4:00 p.m. Neither the PACU staff nor the ICU staff record any fluid intake for Eric despite locations on the PACU chart and the ICU flow sheet where such information is to be recorded. [Exhibit 1].

208. Eric probably received approximately one liter of IV fluid from 12:15 p.m. until after 4:00 p.m. This conclusion assumes that Eric continued to receive fluid from the same IV line after his transfer from the operating room to the PACU. At a rate of 200 cc's per hour, a one liter bag would have lasted past 4:00 p.m. [Exhibit 1, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony of liability experts].

209. Eric was dehydrated prior to surgery, he lost fluid during surgery, and post-operatively he experienced significant fluid losses from third spacing, wound seepage, and hyperthermia. His fluid needs were also increased because of vasodilatation of the vascular system. Eric was

never adequately hydrated post-operatively at NNMC. [Exhibit 1, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony of liability experts].

210. At 4:00 p.m., Dr. Fogelberg ordered (1st set of post-operative doctor's orders) that Eric receive 100 cc's per hour (half normal saline and half a solution containing electrolytes).[Exhibit 1].

211. At 7:50 p.m., Dr. Fogelberg increased the amount of fluid to 125 cc's per hour and ordered a single fluid bolus of 200 cc's. A bolus is a large amount of fluid infused rapidly. This was the only bolus of fluid ordered by Dr. Fogelberg for Eric between the end of surgery and prior to his crash. [Exhibit 1].

212. At 10:10 p.m. Dr. Fogelberg ordered IV fluids increased to 150 cc's per hour (D5 ½ NS at 75 cc. per hour; NS at 75 cc. per hour).*[Exhibit 1].

213. After Eric crashed at 10:50 p.m. both Dr. Bochsler and Dr. Fogelberg ordered fluid boluses. [Exhibit 1].

214. At 11:40 p.m., Dr. Bochsler ordered a 300 cc. bolus of normal saline "now."*[Exhibit 1].

215. At 12:15 a.m., Dr. Fogelberg ordered a bolus of 50 cc's of 5% albumin. Albumin helps to restore vascular volume by, in part, expanding or thickening the blood. She also ordered a 5% albumin drip at 50 cc's per hour.[Exhibit 1].

216. At 12:15 a.m., Dr. Fogelberg ordered D51/2 normal saline at 100 cc. per hour.*[Exhibit 1].

217. Despite the boluses of fluid given after Eric crashed, he produced almost no urine output on the trip from NNMC to UNMH, an indication of continued dehydration. [Exhibit 14, 15; Testimony of liability experts].].

218. At UNMH Eric was found to be hypovolemic. {Exhibit 15-17].

219. Eric received much more aggressive fluid resuscitation at UNMH than he received at NNMC. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

220. Eric entered NNMC in a dehydrated condition and he left NNMC severely dehydrated. Dr. Fogelberg never adequately assessed Eric's hemodynamic status and never adequately intervened to provide effective fluid replacement and volume resuscitation. [Reports & testimony of liability experts].

221. Dr. Fogelberg's handling of Eric Dan's fluid needs was unreasonable and fell below the standard of care. [Reports & testimony of liability experts].

222. Whereas Eric was given too much narcotics and Versed, he was given too little fluid, which hastened his deterioration and crash. [Reports & testimony of liability experts].

Fluid Lines

223. An intravenous fluid (IV) line, a peripheral line inserted into a blood vein, was placed in the antecubital area of Eric's left arm In the emergency room at 12:15 p.m. No other IV line was placed successfully in Eric's body prior to the time of his crash at 10:50 p.m. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

224. Dr. Bochsler attempted and failed to place a PICC line (peripherally inserted central line) in the antecubital area of Eric's right arm at 3:50 p.m. and at 5:20 p.m. The size of PICC line he attempted to use, a 5 French, was the wrong size for someone Eric's size. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

225. Unlike an IV line, a central line allows access into a deep, major vein for the purpose of assuring quicker and more efficient administration of fluids and medications into the body. It also can have multiple ports enabling administration of more than one fluid through a single line. A central line is superior to a peripheral IV for fluid therapy. It delivers fluids more quickly to the heart and other major organs. A central line is also important for effective use of inotropic therapy. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

226. No central line was placed in Eric's body during surgery or while Eric was in the PACU, while he was anesthetized. Placing a central line during surgery would have been a simple matter. After Dr. Bochsler failed twice to insert a PICC line, no further efforts were made to utilize central lines. Medical staff failed to place a central line in Eric's body, which adversely affected the ability to administer fluids and medications. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

227. With a central line in place Eric could have been given his antibiotic doses simultaneously. Rapid administration of antibiotics was needed in order deal with Eric's sepsis. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

228. Nurse J.M. Russell attempted unsuccessfully to place an IV line in Eric's right antecubital area at 8:15 p.m.* [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

229. 39. A second IV line would have allowed more timely administration of antibiotics to Eric. It would also provide venous access in case the first line failed. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

230. 40. Neither Dr. Fogelberg nor any nurse except Nurse Russell attempted to place a second IV line in Eric's arm. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

231. 41. Nurse Russell's inability to place a second IV line was most likely due to Eric's dehydrated state. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

232. Medical staff at NNMC did not place a second IV line in Eric's body while he was at NNMC, so all IV fluids and medications had to be administered through a single line. This interfered with rapid, focused treatment of Eric's sepsis and facilitated Eric's worsening condition after 6:00 p.m. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

233. Failure to place and use a central line for fluids and medication was unreasonable and fell below the standard of care. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

Antibiotics

234. The single most vital intervention for addressing sepsis is immediate use of broad-spectrum antibiotics. Together with aggressive fluid resuscitation, rapid administration of antibiotics is essential in combating sepsis and in preventing its continued spread. Because the exact organism causing the sepsis is often, as in Eric's case, not known, a mix of antibiotics to cover the possible sources of infection is required. These antibiotics are to be given without delay and in sufficient doses to aggressively combat the subject organisms.[Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

235. In the emergency room Eric was started on a 500 mg dose of Ceftizoxime administered by IV.* [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

236. In the emergency room, the antibiotic Flagyl was ordered (250 mg. by IV), but there is no documentation of the ordered Flagyl having been administered.* Neither the emergency room staff nor the operating room staff documented any Flagyl being administered to Eric. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

237. At 4:00 p.m., one hour after surgery ended, Dr. Fogelberg wrote her first post-operative order for antibiotics:

a. Ampicillin 900 mg's every 6 hours.
b. Gentamycin 40 mg's every 8 hours.
c. Clindamycin 150 mg's every six hours.

238. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

239. These antibiotics were broad-spectrum antibiotics intended to provide broad antibiotic coverage for the most likely organisms causing infection in Eric Dan. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

240. Eric did not get the ordered antibiotics simultaneously because they had to be administered by IV and he only had one IV line, which required gradual infusion back to back, which could take up to an hour for a single medication. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

241. Nursing staff administered the initial doses of antibiotics at the following times and in the following order:

1. Gentamycin given at 5:00 p.m., two hours post-operatively.
2. Clindamycin given at 6:00 p.m., three hours post-operatively.
3. Ampicillin given at 7:15, four hours fifteen minutes post-operatively.

[Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

242. Although nursing staff scheduled Eric for a dose of Ampicillin (900 mg.) at 6:00 p.m., during Nurse Lemon's shift (she was instead giving Eric excessive morphine at this time) it was not given until 7:15 p.m. Nurse Lemon was more interested in giving Eric improper doses of morphine and Versed than in getting him his Ampicillin.

243. Ampicillin was an antibiotic that would have been of particular utility in treating Eric's infection because of the particular organisms that infected Eric, as later verified by tissue studies taken surgery. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

244. Flagyl was another antibiotic that would have been of particular utility in treating Eric's infection, but it was not given. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

245. After Eric crashed he received his second dose of Ampicillin at midnight, less than 5 hours after his first dose (the ordered timing for this medication was every 8 hours). [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

246. Eric Dan could have handled larger doses of Ampicillin and Clindamycin, and was given larger doses of these two medications at UNMH (Ampicillin 1600 mg's; Clindamycin 175 mg's). [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

247. Eric received no dose of Ampicillin until he was already over-medicated with narcotics and sedatives. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

248. Eric's scheduled 1:00 a.m. dose of Gentamycin (40 mg.) was not given. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

249. Post-operatively, Eric's infection gradually worsened, aggravated by the untimely administration of narcotics and the inadequate dosing, particularly of the Ampicillin. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

250. The broad spectrum antibiotics ordered for Eric's infection were later identified as being effective for the type of infectious processes he was experiencing. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

251. NNMC staff was negligent in the administration of antibiotic therapy to Eric Dan. The actions and omissions of staff fell below the standard of care. Flagyl should have been given, the post-operative antibiotics should have been given earlier, and the dose of Ampicillin and Clindamycin should have been greater. NNMC staff was not sufficiently aggressive in its approach to Eric's sepsis. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

Inotropic Therapy

252. Inotropic therapy is commonly used in cases of sepsis in order to help maintain blood pressure, improve cardiac output, and assist with tissue perfusion. Dopamine is a commonly used vasopressor agent that could have been used in Eric's case. A vasopressor helps raise blood pressure, in part, by reducing the volume of the blood vessels and reversing the vasodilative effects of sepsis. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

253. Inotropic therapy was not considered or attempted at NNMC until after Eric crashed at 10:50 p.m., even though Eric was hypotensive from at least 9:00 p.m. onward. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

254. Dopamine was mixed and made available at about 11:40 p.m. on the order of Dr. Bochsler, but was not utilized. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

255. Failure to use inotropic therapy to treat Eric's hypotension was negligent and fell below the standard of care. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

ABG's

256. ABG's provide accurate data on a patient's PH balance, allow a doctor to determine how badly acidotic a patient is, indicates whether or not the patient is compensating, indicates whether or not acidosis is respiratory or metabolic, and shows the amounts of carbon dioxide and oxygen in the blood. ABG data is of critical importance when a patient might have respiratory complications or might be at risk for such problems, especially when it is known already that the patient is acidotic and septic. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

257. Repeat ABG's help show how a patient's condition is changing and provide accurate information on whether or not medical interventions are working. ABG's may be used to help guide treatments such as inotropic therapy and determine whether or not additional interventions, such as re-intubation and mechanical ventilation, are needed. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

258. No arterial blood gases (ABG's) were ordered pre-operatively for Eric.* [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

259. Dr. Fogelberg knew prior to surgery that Eric was septic and acidotic, but she did not have accurate, detailed, up-to-date information on his acid-base balance or the nature and severity of his acidosis, and she lacked precise information on whether or not Eric's attempts at compensation were working. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

260. Eric should have received an ABG prior to or during surgery in order to establish a baseline for more accurately appraising his status post-operatively, especially if it was contemplated keeping him at NNMC. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

261. On July 21, 1998, NNMC had a specific written policy stating that arterial blood gases should be taken within one half hour after extubation. Either Dr. Fogelberg or Nurse Hart could have ordered this ABG. They did not order an ABG, however, and neither did Nurse Lemon after she assumed responsibility for Eric's care. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

262. No arterial blood gases were ordered for Eric post-operatively until ordered by Dr. Bochsler at 11:40 p.m., after Eric crashed. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

263. Vital data that could have been available to Dr. Fogelberg and nursing staff for the assessment of Eric's condition and for the purpose of making timely decisions about his care was unavailable because of the failure to follow hospital policy. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

264. Especially in view of the nursing failure to do proper vital sign monitoring, particularly by Peggy Lemon, and in view of Dr. Fogelberg's absence from the ICU after 6:20 p.m., ABG's were much needed. The fact that Eric was given unauthorized amounts of morphine and Versed, with their depressant effects on breathing, made the absence of ABG's even more significant. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

265. The failure to order ABG's prior to Eric's crash was negligent and fell below the standard of care. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

Monitoring & Testing

266. NNMC had a written policy requiring that an ICU patient's vital signs, pulse, blood pressure, respiration rates, be recorded after admission according to the following frequency:

a. every 15 minutes for 1 hour
b. every 30 minutes for 1 hour
c. every 1 hour for 2 hours

as ordered, but no less than every 4 hours

[Exhibit 8].

267. More frequent recording of vital signs should be done if the patient's condition warranted. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

268. Eric's status as a septic pediatric patient in an adult ICU being attended to by nurses without PALS certification made him a candidate for more frequent recording of vital signs than every hour. Eric's condition should have been monitored every 15 minutes as long as his vital signs showed instability. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

269. Nurse Hart recorded no vital signs for Eric. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

270. Nurse Lemon recorded vital signs only at 5:00 p.m. and 6:00 p.m. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

271. No vital signs for Eric were recorded between 6:00 p.m. and 8:00 p.m. This was a critical time period during which Eric's condition started to deteriorate. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

272. Eric's temperature was not recorded during the three hour period from 5:00 p.m. until 8:00 p.m.* [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

273. Recording of vital signs was incomplete and some vital signs were missed at significant times. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

274. Neither Nurse Hart nor Nurse Lemon followed the written policy about monitoring of vital signs. Their failure was negligent and fell below the standard of care. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

275. Nurse Russell attempted to record vital signs every half hour, but was not entirely successful in doing that, failing to record vital signs at 10:30 p.m. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

276. Dr. Fogelberg did not consider and did not use invasive hemodynamic monitoring techniques, such as a pulmonary catheter (a Swan-Ganz line) or a central venous catheter at NNMC as part of Eric Dan's medical care. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

277. Vital information on Eric's condition could have been made available by use of such methods, which could have guided interventions and therapy. Central venous pressure, cardiac output, and arterial pressures could have been monitored, and perfusion could have been measured with a much higher degree of accuracy than external monitoring. Because dropping blood pressure measured by a cuff device is a late indicator of shock, the use of invasive monitoring would have advised Dr. Fogelberg at an earlier time of Eric's pending collapse. Similarly, a pulse oximetry device for measuring oxygen saturations can be misleading in cases of septic shock. Invasive monitoring would have given Dr. Fogelberg a much more accurate picture of Eric's condition. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

278. Failure to use invasive monitoring in Eric's case was negligent and fell below the standard of care. Particularly because Eric was a septic pediatric patient in an adult ICU, the best available methods of monitoring his condition should have been used. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

279. Monitoring negligence was a significant factor in causing Eric's hypoxic-ischemic brain injury. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

280. No chest x-ray was ordered after Eric's admission to the ICU until 11:20 p.m., after Eric crashed. This was untimely, especially in view of the right mainstem intubation. An earlier x-ray would have revealed atelectasis and a more seriously compromised breathing

capacity than was evident to Dr. Fogelberg. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

281. Failure to order a chest x-ray between 6:00 p.m. and 10:50 p.m. was negligent and fell below the standard of care. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

282. The two sets of labs taken in the emergency room prior to 1:00 p.m. revealed an infectious process and acidosis. Initially Dr. Fogelberg ordered no labs for the evening of July 21, 1998, but she later changed her orders at 4:45 p.m., after consultation with Dr. Bochsler. Dr. Bochsler wanted to check Eric's sodium that evening. Dr. Fogelberg ordered a Chem 7 to be done at 8:00 p.m. This was not done in a timely fashion and was not taken until 9:44 p.m. Dr. Fogelberg doubts she reviewed this set of labs when she went to Eric's bedside at 10:00 p.m. From at least 1:00 p.m. until after Eric crashed, Dr. Fogelberg lacked accurate and timely information about Eric's bicarbonate level, his sodium level, his BUN level, and other relevant blood chemistries. The 9:44 p.m. labs showed increased acidosis and problems with Eric's hemodynamic stability. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

283. The untimely taking of the 8:00 p.m. labs and the failure to review them was negligent and fell below the standard of care. Additional labs should have been ordered after 4:00 p.m. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

Temperature

284. Although Eric came to the hospital with a temperature of 102°, post-operatively Eric's temperature went down to 98°.[Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

285. In the initial set of ICU doctor's orders at 4:00 p.m., Dr. Fogelberg ordered Tylenol for temperatures in excess of 101°.[Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

286. The Tylenol doses ordered for Eric were inadequate for a child Eric's weight. [Exhibit

1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

287. At 5:00 p.m. Eric had an acceptable temperature of 99°.[Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

288. No temperatures were recorded for the next three hours by Peggy Lemon. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

289. Nurse Russell noted that Eric's temperature was 103.5° after she came on shift. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

290. Nurse Russell gave Eric a Tylenol suppository (120 mg.) at 8:05 p.m. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

291. Eric was given another Tylenol suppository (120 mg.) at 9:35 p.m. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

292. At 10:10 Dr. Fogelberg authorized giving a larger dose of Tylenol (325 mg. as needed every six hours). She did not authorize giving this dose immediately. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

293. NNMC staff did not use other available methods to control Eric's temperature, such as tepid sponge baths, cooling blankets, alcohol, ice packs, or removal of blankets and clothing. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

294. Eric's temperature did not return to normal during the remainder of his stay at NNMC. Eric was hyperthermic for several hours. Eric's hyperthermia caused fluid losses and contributed to his dehydration and the worsening of his sepsis. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

295. Dr. Fogelberg's and Nurse Lemon's handling of Eric's hyperthermia was negligent and fell below the standard of care. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

Glasgow Coma Scale

296. Eric Dan had a Glasgow Coma Scale score of 15 in the emergency room.* [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

297. At 8:00 p.m. Eric had a Glasgow Coma Scale score of 10.* [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

Weight

298. Pre-operatively, at 1:10 p.m., Eric was reported by the operating room nurses to have a weight of 38 pounds, or more than 17 kg's. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

299. Dr. Neufeld wrote on his pre-anesthesia evaluation that Eric was 14.8 kg's. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

300. Dr. Fogelberg mistakenly wrote on her doctor's orders that Eric's weight was 15 kg's, and she relied upon that notation of Eric's weight for determining medication doses and IV fluid amounts. Dr. Fogelberg did not use the weight taken post-operatively in the ICU, which was almost 3 kg's greater. Had she used the correct weight for determining Eric's needs, Dr. Fogelberg would have giving him more fluids and larger doses of antibiotics and Tylenol. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

301. 123. Upon arrival in the intensive care unit, Eric's weight was recorded to be 17.7 kg. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

302. Eric's actual weight, as determined by the bed scale in the ICU, was 17.7 kg's, which is consistent both with Eric's pre-operative weight and his weight at UNMH. This weight was entered by the ICU nurses on the ICU flow sheet at the time of Eric's admission to the ICU. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

303. Failure to use an accurate and consistent weight was negligent and fell below the standard of care. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

Vital Signs

304. Eric Dan's vital signs shortly after arrival in the emergency room were recorded to be Pulse: 147; Blood Pressure: 128/80; Temp. 102°. No respiration rate was initially recorded, but at 12:30 p.m. the respiration rate was recorded to be 32 respirations per minute.* [Exhibit 1].

305. 14. Pre-operatively, at 1:10 p.m., according to the operating room nurses, Eric's vital signs were reported to be: Pulse: 147; Blood Pressure: 128/80; Respiration Rate: 24; Temperature: 102°.* [Exhibit 1].

306. 15. Pre-operatively, according to the pre-operative checklist performed by Nurse JoAnne Reagan shortly before Eric was transferred to the operating room at 1:20 p.m., Eric's vital signs were reported to be: Pulse: 127; Blood Pressure: 128/80; Respiration Rate: 32. [Exhibit 1].

307. Dr. Neufeld, during his pre-anesthesia evaluation, recorded Eric's vital signs as: Pulse: 147; Blood Pressure: 128/80; Temp. 102°.[Exhibit 1].

308. During surgery, at 2:00 p.m., Eric's vital signs were: Pulse: 150; Blood Pressure: between 115 and 120/60; Respiration Rate: 20. [Exhibit 1].

309. During surgery the anesthesiologist recorded Eric's vital signs every 5 minutes. [Exhibit 1].

310. At the end of surgery, on transfer to the Post Anesthesia Care nurses, Eric's vital signs were: Pulse: 164; Blood Pressure: 116/90; Temperature: 98. No respiration rate was recorded.* [Exhibit 1].

311. Upon arrival in the intensive care unit, while intubated, Eric's vital signs were: Pulse: 175; Blood Pressure: 90/45; Respiration Rate: Bagged at 15 beats per minute; Temperature: 98°.*[Exhibit 1].

312. At 4:00 p.m. Eric's vital signs were: Pulse: 165; Blood Pressure:101/56; Respiration Rate: Bagged; Temperature: 98°.[Exhibit 1].

313. While in the PACU Eric's vital signs were recorded every 5 minutes. [Exhibit 1].

314. At the time of extubation Eric's blood pressure was 122/48; no temperature was taken at the time of extubation. [Exhibit 1].

315. Just after extubation, Eric's vital signs were: Pulse: 179; Respiration Rate: 45. [Exhibit 1].

316. At 4:41 p.m., Eric's vital signs were: Pulse: 175; Blood Pressure: 122/65; Respiration Rate: 28. No temperature was recorded.* [Exhibit 1].

317. At 5:00 p.m. Eric's vital signs were: Pulse: 193; Blood Pressure: 114/51; Respiration Rate: 28; Temperature: 99°.*[Exhibit 1].

318. At 6:00 p.m. Eric's vital signs were: Pulse: 177; Blood Pressure: 99/38; Respiration Rate: 16.* [Exhibit 1].

319. At 6:20 p.m. Eric's heart rate was 200-210 beats per minute. [Exhibit 1].

320. At 7:00 p.m. Eric's heart rate was 202 beats per minute. [Exhibit 1].

321. At 7:17 p.m., Eric had a pulse of 205 and a respiration rate of 18. [Exhibit 1].

322. At 7:41 p.m., Eric had blood pressure of 95/40 and a pulse of 203. [Exhibit 1].

323. At 8:00 p.m. Eric's vital signs were: Pulse: 202; Blood Pressure: 95/40; Respiration Rate: 18; Temperature: 103.5°.*[Exhibit 1].

324. At 8:30 p.m., Eric's vital signs were: Pulse: 206; Blood Pressure: 91/34; Respiration Rate: 26; Temperature: not recorded. *[Exhibit 1].

325. At 9:00 p.m., Eric's vital signs were: Pulse: 216; Blood Pressure: 67/26; Respiration Rate: 18; Temperature: 104.8°.*[Exhibit 1].

326. At 9:30 p.m., Eric's vital signs were: Pulse: 218; Blood Pressure: 69/29; Respiration Rate: 15; Temperature: 104.4°.*[Exhibit 1].

327. At 10:00 p.m., Eric's vital signs were: Pulse: 220; Blood Pressure: 72/32; Respiration Rate: 16; Temperature: not recorded. *[Exhibit 1].

328. Eric's systolic blood pressure was below normal from 6:00 p.m. until his departure from NNMC at 1:30 a.m. on July 22, 1998. [Exhibit 1].

329. Eric was hypotensive between 9:00 p.m. or a little prior to that time, until he crashed at about 10:50 p.m. [Exhibit 1].

330. Eric's diastolic blood pressure was at or below 40 from 6:00 p.m. on July 21, 1998, until Eric's departure from NNMC at 1:30 a.m. on July 22, 1998. [Exhibit 1].

331. Beginning at about 6:00 p.m. on July 21, 1998, Eric Dan's vital signs began to show signs of gradual deterioration, with his heart rate increasing and his systolic blood pressure and respiration rate trending downward. [Exhibit 1, 39-44; Testimony of liability experts].

332. Eric's vital signs portended problems ahead, but Dr. Fogelberg and the nursing staff at NNMC failed to connect the dots and appreciate Eric's overall clinical picture. As a consequence, critical interventions were not considered and undertaken and Eric was allowed to slide toward eventual cardiorespiratory collapse. The failure to connect the dots as to the everyday vital signs demonstrates that more precise and targeted monitoring was needed, that caring for Eric was beyond the ability of the NNMC ICU, and that Eric should be been re-intubated and transferred. Eric should never have been admitted to the ICU at NNMC. [Exhibit 1, 39-44; Testimony of liability experts].

Cardiac Alarms

333. Two cardiac monitoring strips for Eric were printed on July 21, 1998. [Exhibit 1].

334. The second strip shows information for two times, 7:17 p.m. and 7:41 p.m., and indicates that prior to this time the cardiac alarm was turned off.[Exhibit 1].

335. On July 21, 1998, NNMC had a written policy stating that the cardiac alarms were never to be turned off while the patient's cardiac condition was being monitored in the intensive care unit. [Exhibit 9].

336. Turning off the cardiac alarms was a violation of the standard of care. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

Sepsis

337. Sepsis is a systemic response to infection caused by any of a number of micro-organisms, often by bacteria in the blood, also called bacteremia. Sepsis or the suspicion of sepsis requires rapid, focused, aggressive intervention. The two most immediate responses are appropriate antibiotics and fluid therapy. Consideration must also be given to cardiac and respiratory support, including intubation and mechanical ventilation, if warranted. Inotropic therapy must also be considered, especially if fluid resuscitation does not restore hemodynamic stability. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

338. The organisms that infected Eric were responsive to wide-spectrum antibiotics. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

339. Eric Dan had sepsis and developed compensating septic shock at NNMC. During the course of the evening of July 21, 1998, Eric decompensated and developed uncompensated metabolic acidosis, which is life threatening. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

340. Medical staff at NNMC did not recognize Eric Dan's septic shock in a timely manner, did not appreciate the onset of uncompensated shock, and did not intervene properly to prevent more serious complications. Better monitoring, including ABG's and invasive monitoring, would have provided an accurate and timely assessment of the progress of shock, and would have prompted earlier and more aggressive interventions. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

341. Medical staff at NNMC was negligent in the way it addressed Eric Dan's sepsis. Medical staff at NNMC, particularly Dr. Fogelberg, failed to address Eric Dan's septic shock in a rapid, focused, and aggressive manner. Nurse Lemon hastened the progress of shock by administering excessive amounts of morphine and Versed. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

342. Rapid intervention and proper treatment of sepsis, especially treatment in accordance with PALS protocols, is highly effective in reducing mortality and preventing serious neurological complications. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

343. A success rate of 90% or better has been established for children with perforated appendixes who receive rapid and focused treatment. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

344. With appropriate interventions, Eric had a better than 90% chance of avoiding severe hypoxic-ischemic brain injury. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

Additional Nursing Negligence

345. Nurse Jeannette Hart cared for Eric Dan as an ICU nurse after Eric was discharged from post-anesthesia care until 5:00 p.m. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

346. Nurse Hart was the head nurse for the ICU at NNMC. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

347. Nurse Hart had a copy of the policies and procedures for NNMC in her office in the ICU. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

348. There is no record that Nurse Hart attempted to enforce the policy against admitting pediatric patients under age 12 to the ICU at NNMC. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

349. Nurse Hart did not order an ABG for Eric and there is no record that she raised the matter with Dr. Fogelberg. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

350. Nurse Hart could have ordered an ABG for Eric. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

351. There is no record that Nurse Hart attempted to enforce the hospital's policy on monitoring of vital signs, and no record that she sought to have Eric's vital signs recorded with greater frequency than one hour. Nurse Hart did not record any vital signs for Eric. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

352. While Eric was under the care of Nurse Lemon, Nurse Lemon was assigned to another patient in the ICU. Nurse Lemon was absent from Eric's bedside during times she was attending to her other patient. Eric required a 1:1 nurse/patient ratio. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

353. Nurse Margaret Milam was the charge nurse during Nurse Russell's shift and participated in the care given to Eric, including communicating with Dr. Fogelberg at 9:30 p.m. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

354. As the charge nurse, Nurse Milam was Nurse Russell's supervisor on July 21, 1998. Nurse Russell was not experienced in caring for pediatric patients, particularly critically ill pediatric patients. Nurse Milam and Nurse Hart should have considered this in making the nursing assignment. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

355. Nurse Milam advised Nurse Russell to follow orders and not question Dr. Fogelberg, when Nurse Russell questioned why Eric had been admitted to the ICU at NNMC. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

356. Nurse Milam was in a position to have protected Eric by using the chain of command, by consulting with the pediatrician, Dr. Bochsler, or the respiratory therapist, or by confronting Dr. Fogelberg and insisting upon more effective interventions, but she did not do so, despite the fact that Eric was hypotensive after at least 9:00 p.m. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

357. Communication among the nurses and between the nurses and Dr. Fogelberg was substandard and fell below the standard of care. There is no written indication by any of the nursing staff that they appreciated that Eric was septic and acidotic, and had deteriorating vital signs warranting major interventions. The ICU flow sheet, the nursing assessment, the nursing notes, the nursing diagnosis, the room assignment sheet, and Dr. Fogelberg's progress notes do not indicate an understanding that Eric was septic and acidotic. The ICU flow sheet contains no information on Eric's labs. Recording of information on the ICU flow sheet was substandard and contained ambiguous entries. For example, the fluid information is on the wrong line and contain a number of altered entries. Medication entries also are not complete. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

Causation

358. In the absence of negligence by Dr. Fogelberg and the nursing staff at NNMC, Eric Dan more probably than not would have survived his perforated appendicitis without sustaining a hypoxic ischemic encephalopathy injury. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

359. Dr. Fogelberg admits that if she had kept Eric intubated and transferred him to the UNMH PICU he would not have suffered a hypoxic ischemic encephalopathy injury. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

360. If there had been timely and appropriate measures taken to diagnose and treat Eric Dan's post-operative medical condition, such as early transfer to a pediatric intensive care unit, re-intubation, rapid infusion of fluids, rapid administration of antibiotics, taking of ABG's, and the use of inotropic therapy, and if there had not been excessive administration of narcotics and sedatives, Eric Dan would have not suffered hypoxic, ischemic encephalopathy. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

361. Negligence by the medical staff at NNMC, particularly negligence by Dr. Fogelberg, Nurse Hart, Nurse Lemon, and Nurse Milam was a proximate cause of the hypoxic, ischemic encephalopathy that Eric Dan experienced. [Exhibit 1, 15, 17, 24, 27, 30, 31, 39, 41, 42, 43, 44; Testimony & reports of liability experts].

Damages

362. Eric Dan is severely disabled and his overall developmental ability in terms of age is that of a child less than one year in age. [Reports & Testimony of Damages Experts, Dr. Singer, Dr. Gracey, and Dr. McDonald].

363. Eric Dan requires around the clock care, including feeding, hygienic care, and physical mobility provided by other persons. [Reports & Testimony of Damages Experts, Dr. Singer, Dr. Gracey, and Dr. McDonald].

364. Eric Dan is not vegetative and does engage in some interaction and limited communication with his family. [Reports & Testimony of Damages Experts, Dr. Singer, Dr. Gracey, and Dr. McDonald].

365. Eric Dan will require basic care provided 24-houra a day by others for the rest of his life. [Reports & Testimony of Damages Experts, Dr. Singer, Dr. Gracey, and Dr. McDonald].

366. Eric Dan has severe and global neurological abnormalities, including spastic quadriplegia, cognitive impairment, and visual impairment.* [Reports & Testimony of Damages Experts, Dr. Singer, Dr. Gracey, and Dr. McDonald].

367. Eric Dan's disability and impairments are permanent.* [Reports & Testimony of Damages Experts, Dr. Singer, Dr. Gracey, and Dr. McDonald].

368. Eric will require physical and occupational therapy throughout his life. [Reports & Testimony of Damages Experts, Dr. Singer, Dr. Gracey, and Dr. McDonald].

369. Eric will require close attention to the maintenance of skin integrity throughout his life. [Reports & Testimony of Damages Experts, Dr. Singer, Dr. Gracey, and Dr. McDonald].

370. Eric Dan is dependent upon others for all activities of daily living and he will remain dependent for his entire life. [Reports & Testimony of Damages Experts, Dr. Singer, Dr. Gracey, and Dr. McDonald].

371. Eric will never be capable of being left unattended, either by his parents or another attendant. [Reports & Testimony of Damages Experts, Dr. Singer, Dr. Gracey, and Dr. McDonald].

372. Eric will require a team of healthcare professionals, including a pediatrician and later an internist/family medicine specialist, a physiatrist and/or orthopedist to manage his physical and occupational therapists and a speech therapist to assess his swallowing mechanism. [Reports & Testimony of Damages Experts, Dr. Singer, Dr. Gracey, and Dr. McDonald].

373. Because of the negligence of medical personnel employed by the United States, including Dr. Fogelberg, Nurse Lemon, Nurse Hart, and Nurse Milam, Eric Dan suffered physical, emotional, and mental injury and sustained financial damages, for which he is entitled to compensation. [Reports & Testimony of Damages Experts, Dr. Singer, Dr. Gracey, and Dr. McDonald].

374. Eric Dan suffered special damages in the nature of medical expense, loss of earning capacity, and non-medical expense (including household services or housekeeping losses). These losses include future losses or damages. [Reports & Testimony of Damages Experts, Dr. Singer, Dr. Gracey, and Dr. McDonald].

375. Eric Dan suffered general damages in the nature of physical pain, emotional and psychological suffering, loss of enjoyment of life, disfigurement, and damages associated with the nature, duration, and extent of Eric's injuries, which are global and permanent and which deprive him of normal cognition and mobility and the ability to communicate beyond an elemental level. Eric Dan's injuries were catastrophic and have effectively deprived him of a conscious, sentient, and meaningful life. [Reports & Testimony of Damages Experts, Dr. Singer, Dr. Gracey, and Dr. McDonald].

376. The life care plan prepared by plaintiff's expert, James Gracey, and the costs associated with that plan, are reasonable and will provide an appropriate level of future care for Eric. Dr. Gracey's expert opinion was that Eric Dan's future care will range between $10,802,466 and $12,179,367, based on present value. [Reports & Testimony of Damages Experts, Dr. Singer, Dr. Gracey, and Dr. McDonald].

377. Present value according to Dr. Gracey's plan is based on the offset method, in which it is assumed that future increases in costs, including medical costs, will approximate the value of interest. Inflation and interest thus offset one another. This is a reasonable assumption, particularly in view of the need to provide for Eric during his entire life and the lack of certainty about the future. [Reports & Testimony of Damages Experts, Dr. Singer, Dr. Gracey, and Dr. McDonald].

378. Eric Dan's family intends to relocate from the remote reservation home they live in to Albuquerque in order to provide care for Eric and in order to have better access to medical facilities. Relocation will require the purchase of a house, which will cost approximately $250,000. Eric is entitled to damages for purchase of this house as part of his future care. [Reports & Testimony of Damages Experts, Dr. Singer, Dr. Gracey, and Dr. McDonald].

379. The economist report of Brian McDonald is reasonable in assessing the present value of Eric Dan's future care, and the amount identified in the report, i.e., $8,185,263, is a

reasonable valuation of the cost of Eric Dan's future care. [Reports & Testimony of Damages Experts, Dr. Singer, Dr. Gracey, and Dr. McDonald].

380. Dr. McDonald's calculations of present value are based on the expectation that interest will exceed costs increases in the future. This approach is based on historical figures. It is a reasonable approach to present value. [Reports & Testimony of Damages Experts, Dr. Singer, Dr. Gracey, and Dr. McDonald].

381. Eric Dan has suffered a loss of earning capacity of $1,144,585, stated in terms of present value. [Reports & Testimony of Damages Experts, Dr. Singer, Dr. Gracey, and Dr. McDonald].

382. Eric Dan has suffered a loss of household services of $200,469,00, stated in terms of present value. [Reports & Testimony of Damages Experts, Dr. Singer, Dr. Gracey, and Dr. McDonald].

408. Eric Dan suffered damages for past medical expense in the amount of approximately $761,254.20, including the value of the care provided by his family members, which is approximately $508,080.00. [See, Hill v. U.S., 81 F.3d 118 (10th Cir. 1996); testimony of James Gracey; Exhibit 66]

408. Eric Dan suffered damages for past non-medical expense, excluding household services, in the amount of approximately $8,000.00. This figure includes the purchase of a new heating system in order to protect Eric from respiratory problems, which cost about $3,000. [Reports & Testimony of Damages Experts, Dr. Singer, Dr. Gracey, and Dr. McDonald].

383. Eric Dan experienced pain and suffering while he was being suffocated by NNMC staff. He is now unable to communicate pain and suffering, except by moaning or crying, and he cannot tell anyone how he feels or where he is experiencing symptoms like pain, pressure, or itching. He cannot even communicate whether or not he feels too hot or too cold. Eric cannot communicate anything about his vision or his hearing ability. After his injury, Eric suffered a fracture. He could not assist in giving information about the injury and had to experience the pain alone, isolated, without being able to share his fear or his feelings in any meaningful way. Eric will experience future pain and suffering because of his condition. For past and future pain and suffering, Eric is entitled to the sum of $1.5 million. [Reports & Testimony of Damages Experts, Dr. Singer, Dr. Gracey, and Dr. McDonald].

384. Eric has suffered a devastating loss of enjoyment of life. He will never be able to enjoy the normal activities of human life and will never be able to develop intellectually and emotionally. He has been robbed of his essential personhood, his identify as a thinking, feeling, caring person who is part of a community and a family. He will never have children or a spouse, and he will never engage in any athletic competition or even enjoy being a spectator. Eric's damages for loss of enjoyment of life are $3.0 million. [Reports & Testimony of Damages Experts, Dr. Singer, Dr. Gracey, and Dr. McDonald].

385. Eric Dan's and plaintiffs' total damages exceed $10,000,000 and are in the range of $12,000,000-$20,000,000. [Reports & Testimony of Damages Experts, Dr. Singer, Dr. Gracey, and Dr. McDonald].

386. Eric's total damages, past and future, general and special, equal the sum of $19,043,675.20. [Reports & Testimony of Damages Experts, Dr. Singer, Dr. Gracey, and Dr. McDonald].

387. The allocation of fault between Dr. Fogelberg and the nursing staff (Nurses Hart, Lemon, and Milam) is 2/3's (66.66%) for Dr. Fogelberg and 1/3 (33.33 %) for the nurses.

413. The facts do not support the finding of comparative fault against Ernest and Elsie Dan.

REQUESTED CONCLUSIONS OF LAW

1. This court has jurisdiction of this matter and venue is proper in this district.

2. The substantive law governing this case is the FTCA.

3. Under the FTCA the United States is liable in money damages for losses and injuries resulting from the negligence of its employees, Dr. Karen Fogelberg, Nurse Jeannette Hart, and Nurse Peggy Lemon in particular, each one former a party in this action. The United States is also liable for the negligence of Nurse Margaret Milam, who was not identified by the United States as a participant in the care of Eric Dan until after the close of discovery in this matter.

4. The FTCA does not impose a limitation on damages.

5. In accordance with the language of 28 U.S.C. § 1346(b) of the FTCA, liability of the United States is to be determined by application of the law of the place where the negligent act or omission occurred.

6. The relevant law is the law Navajo Nation, which in many respects as to the law of negligence and damages parallels the law of New Mexico, but which does not cap medical malpractice damages.

7. If the law of New Mexico is held to apply to this case and if the government is given the benefit of the New Mexico cap on some medical malpractice damages, then the cap only applies to that portion of the total damages that are attributable to the negligence of the physician, Dr. Fogelberg, not to the negligence of the nursing staff. There is no cap on the portion of the damages that is attributable to Nurses Peggy Lemon, Nurse Jeannette Hart, and Nurse Margaret Milam.

8. If the law of New Mexico is held apply to this case, defendant failed to raise the issue of the application of the New Mexico Medical Malpractice cap in a timely manner, filing a motion in limine that should have been a motion for partial summary judgment. If defendant is deemed not to have waived the issue, then the cap does not apply for the reasons stated in plaintiffs' responsive brief, including the reason that New Mexico's cap on some medical negligence damages contained in the New Mexico Medical Malpractice Act is unconstitutional and has been declared invalid by a state district court in New Mexico.

9. The basis for finding liability in a case of medical malpractice is: duty, breach of duty, injury, and proximate causation.

10. Staff at NNMC owed Eric Dan a duty to exercise reasonable care in the provision of medical treatment, care, and diagnosis.

11. Staff at NNMC breached their duty of reasonable care in a number of ways, including the failure to make a timely transfer of Eric Dan to a pediatric intensive care facility, such as the University of New Mexico Hospital.

12. The multiple failures of Dr. Fogelberg and other medical staff at NNMC in treating and diagnosing Eric Dan's condition and in addressing his symptoms were negligent and even reckless. Specifically, personnel were negligent in dealing with the following issues, among others:

    A. extubation and re-intubation and ventilatory support
    B. emergency cardiorespiratory resuscitation
    C. antibiotics
    D. dehydration and hypovolemia
    E. inotropic therapy
    F. inappropriate and excessive use of narcotics and sedatives
    G. ABG's
    H. consultation with outside specialists
    I. Presence at bedside in ICU during critical hours
    J. Untimely arrival in ICU during code
    K. accurately assessing Eric's condition and appreciating problems
    L. proper assignment and supervision of nursing staff
    M. communications among staff
    N. causing, diagnosing, and addressing atelectasis
    O. untimely labs and x-rays
    P. monitoring and recording patient data and vital signs
    Q. invasive monitoring
    R. hyperthermia
    S. hypotension
    T. acidosis
    U. infection/sepsis
    V. tachycardia
    W. hypoxia

13. Negligence by staff at NNMC was a proximate cause of Eric Dan's hypoxic ischemic encephalopathy injury, which has left Eric with spastic quadriplegia and severe cognitive impairments, which are permanent.

14. The allocation of fault between Dr. Fogelberg and the nursing staff (Nurses Hart, Lemon, and Milam) is 2/3's (66.66%) for Dr. Fogelberg and 1/3 (33.33 %) for the nurses.

15. Plaintiffs are entitled to judgment against defendant for damages that resulted from the negligence of its employees as follows:

    A. Past medical care: $761,254.20

B. Future medical care:$12,179,367

C. Cost of purchasing a home in Albuquerque in which Eric can be cared for appropriately by his family and by other care givers: $250,000.

D. Lost earning capacity: $1,144,585

E. Lost household services: $200,469

F. Non medical expenses, excluding household services: $8,000.00

G. Pain and suffering, including the future: $1.5 million

H. Loss of Enjoyment of Life, including the future: $3 million

16. On behalf of Eric Dan, Elsie and Ernest Dan are entitled to damages in the amount of $19,043,675.20.

17. The facts do not support the finding of comparative fault against Ernest and Elsie Dan.

Respectfully submitted,

ROSENFELT, BARLOW, & BORG, P.A.
1805 Carlisle Blvd, NE
Albuquerque, NM 87110
(505) 266-3441

By _____
Scott E. Borg
Cynthia Braun

ATTORNEYS FOR PLAINTIFF

CERTIFICATE OF SERVICE

I hereby certify that this document was duly served on opposing counsel of record, Gail Johnson, on the 21 day of October, 2002, by sending it through Federal Express, overnight delivery.

Scott E. Borg